AMENDMENTS TO THE SPECIFICATION

Please amend the specification beginning on page 4, line 23 as follows:

In this case, the network N performs communication using the services x1, x2 provided by the carrier X in the area A. However, when the network N has moved to the area B, the service x2 has become unusable, whereby the amount of the data that can be transmitted decreases. Furthermore, the network N having moved to the area C has become unable to get the service provided by the carrier X, which disables the communication. Though the network N also subscribes to the service provided by the carrier Y, the conventional art is not capable of combining services provided by the different carriers, that is, the service provided by the carrier X and the service provided by the carrier Y. Therefore, the user is not able to get a service provided by the carrier Y at a place to which the user has moved. Moreover, the conventional art represented by the aforementioned IETF Internet Draft (drafternst-nemo-terminology-01.txt) has no means for saving the wireless resources without replying on a network operator.

Please amend the specification beginning on page 7, line 8 as follows:

a logically multiplexed line is configured by combing the plurality of communication means between the mobile router and the home agent, through which the mobile network node and the correspondent node communicate with each other.

Please amend the specification beginning on page 8, line 19 as follows:

The 10th invention to solve the aforementioned problem is as described in one of the 1st to 9th invention, wherein the route information in the control table of the ~~mobile router~~ home agent includes at least one of a type of communication means or line, a packet delay, a bandwidth of the line, or a timing enabling transmission of the next packet.

Please amend the specification beginning on page 17, line 8 as follows:

a control table which stores the identified address and route information of the ~~adders~~ address, such that the address and the route information are associated with each other; and

Please amend the specification beginning on page 18, line 1 as follows:

The 51st invention to solve the aforementioned problem is as described in one of the 47th to 50th invention, which comprises means for deleting from the control table, information related to an address of the communication means which the home agent is notified of, based on notification of an address of the communication means scheduled to be disconnected from the mobile ~~connector~~ router.

Please amend the specification beginning on page 27, line 25 as follows:

The 92nd invention to solve the aforementioned problem is as described in one of the 89th to 91st invention, wherein the program causes the home agent to function as means for updating information in a control table that manages an address of the communication means of the mobile router, based on notification of a change in connection status and an address assigned to the communication means.

Please amend the specification beginning on page 32, line 15 as follows:

Furthermore, the present invention, when updating the route information, estimates transmission delay after update by referring to a transmission history after the update becomes effective and the route information after update, and selects the route (address) and reflects it to a packet scheduling sending packets. Accordingly, it is possible to prevent decrease in multiplication efficiency in a system where the status of individual routes (addresses) dynamically vary.

Please amend the specification beginning on page 36, line 1 as follows:

The traffic measurement portion 330 monitors the communication interface 311, and measures a traffic that flows into the mobile network and a traffic that flows out

of the mobile network. If necessary, the traffic measurement portion 330 instructs the line management and address acquisition portion 324 to disconnect and/or connect the line.

Please amend the specification beginning on page 38, line 14 as follows:

This case is specifically applied to a case such as where the use of the network of that day is complete and it is judged that no traffic will be generated thereafter for a certain period of time. Alternatively, this case is applied to a case where since plurality of lines of IMT 2000 are used the number of currently-connected lines may be reduced due to decreased traffic amount. In this case, the traffic measurement portion 330 monitors bidirectional traffic between the mobile router and the home agent, passing through the communication interface 311. When the traffic amount decreases to a certain threshold or lower, the traffic measurement portion 330 notifies the line management and address acquisition portion 324 of the decrease, and disconnects the currently-connected line. On the other hand, when the traffic amount increases to a certain threshold or higher, the traffic measurement portion 330 notifies the line management and address acquisition portion 324 of the increase, allowing connection to a new line where the address registration process operation is executed. This operation enables saving of the wireless resource within the cell, which thereby reducing a possibility that voice communications executed by individual passengers is rejected in the case where the mobile network is configured in a train such as a bullet train.

Please amend the specification beginning on page 38, line 35 as follows:

The third example of a change in the line status refers to a case where a change in the line status occurs irrespective of the intention of the mobile router 105. That is, the line disconnection and/or the line reconnection occur irrespective of the intention of the mobile router 105, caused by a coverage status change caused by change in the wireless resource or in the surrounding buildings in the case of wireless communication, and caused by events such as plugging and/or unplugging of a cable or network congestion in the case of wired communication.

Please amend the specification beginning on page 46, line 28 as follows:

In a similar manner, if there is a queue for each flow, it is judged whether at least one queue is not empty. If the queue for the BE class is not empty, it is determined that the packet is retrieved from the queue for the ~~QoS~~ BE class of the queuing portion 328 and transmitted (Step A009). In the case where there is a queue for each flow, a queue which retrieves the packet using any desired algorithm may be selected. In the case where the queue for the BE class is also empty, the operation returns to Step A001.

Please amend the specification beginning on page 49, line 12 as follows:

In the case where there is an interface adopting the measured-rate billing system, a list of the interfaces adopting the measured-rate billing system which is sorted in the ascending order of the unit price is created (Step C012). When it is checked whether the list is empty (Step ~~C012~~ C013), since there is at least one list, an interface described in the front line of the list is tentatively selected and deleted from the list (Step C014). Next, it is checked whether transmission is possible with the temporarily selected interface (Step C015), if transmission is possible, that interface is selected (Step 023). If transmission is impossible, the operation returns to STEP C013 and the interface is selected again from the list. In the case where transmission is impossible with all interfaces, since the list becomes empty in the list at Step C013, the packet is discarded (Step C024).

Please amend the specification beginning on page 55, line 3 as follows:

Similarly, in the case where there is a queue for each flow, it is judged whether at least one queue is not empty. If the queue for the BE class is not empty, it is determined that the packet is retrieved from the queue for the BE class of the queuing portion 422 and transmitted (Step B010). In the case where there is a queue for each flow, a queue retrieving the packet using any desired algorithm may be selected. In the case where the queue for the BE class is also empty, the operation returns to Step ~~A001~~ B001.

Please amend the specification beginning on page 55, line 34 as follows:

In the process as described above, in the case where packet transmission is executed, the next packet transmission timing has been calculated (Step B007). For example, in the case where the destination address with the bandwidth of 384 kbps (that is, the address of the communication interface of the mobile router 105) is selected, when the packet with a data size of 1500 bytes is transmitted, the time allowing the next packet transmission is updated for the applicable destination address in the control table stored in the memory portion 426, so that the next packet is transmitted after 31.25 ms. Provided that the transmission timing may be updated, allowing burst characteristics to some extent, such as by using a leaky bucket.

Please amend the specification beginning on page 56, line 21 as follows:

For example, in the case where the destination address with a bandwidth of 384 kbps is selected, and when a packet with a data size of 1500 bytes is transmitted, the time allowing the next packet transmission is updated for the applicable destination address in the control table stored in the memory portion 426 so that the next packet is transmitted after 31.25 ms. When the same destination address is selected in the next time, even in the case where the time is not the exact timing allowing next packet transmission, it is judged that transmission is possible, in order to allow a certain degree of burst characteristic. Later, an operation of updating the timing allowing next packet transmission is repeated. When transmission possibility is checked, the timing allowing next packet transmission deviates from the current time by the threshold or more, it is judged that transmission is not possible.

Please amend the specification beginning on page 57, line 11 as follows:

Among the four addresses, the address C.C.C.50~~1~~ has a wireless LAN-type communication interface with a bandwidth of 11 Mbps and the measured-rate billing system. The remaining three addresses: B.B.B.200, B.B.B.201 and B.B.B.202 has an IMT-2000-type communication interface, with a bandwidth of 384 kbps and the measured-rate billing system. In the case where all communication interfaces adopt the

measured-rate billing system as described above, the communication interface is selected as described below.

Please amend the specification beginning on page 59, line 18 as follows:

The buffer and sequence control portion 322 uses the serial numbers added by the home agent 117 to execute a sequence control operation which is, for example, the same as one executed by the buffer and sequence control portion 425 of the home agent 117. Provided that the sequence control may be executed using a method different ~~form~~ from that of the buffer and sequence control portion 425 of the home agent 117.

Please amend the specification beginning on page 63, line 22 as follows:

The scheduling portion1312 refers, for a packet to be transmitted ~~net~~ next, to current route information and a transmission history after a packet in which the information becomes effective is transmitted, and estimates delay in arrival at the receiving node. The transmission history is stored in the memory portion 1315. The scheduling portion 1312 selects the route which minimizes the estimated delay in arrival, as the transmission route of the packet to be transferred next. After the scheduling portion 1312 transfers the packet to the selected route, it adds the transmission time to the transmission history in the memory portion 1315.

Please amend the specification beginning on page 72, line 7 as follows:

Next, it is checked whether the receiving quality of the selected line of cdma2000 1x 1x#2 is ~~checked~~ good (Step 4a). The line has a "good" receiving quality line according to the quality information 2500.

Please amend the specification beginning on page 75, line 14 as follows:

Subsequently, the total of the average rates of the communication interfaces that are added in this communication interface selection process is compared with the difference between the target minimum value and the actual value of the communication rate (Step

9a). PDC PDC#1 which was added in this communication interface selection process has an average download rate of 10 kbps. Since the average download rates of ~~cdma2000 1x#2 1~~ cdma2000 1x 1x#2 that was previously added is 60 kbps, the total of the average rates is 70 kbps.

Please amend the specification beginning on page 76, line 34 as follows:

In explaining Example 3, the overall operation policy information 2310 shown in FIG. ~~28~~ 23 and the statistic information 2400 shown in FIG. 24, and the communication interface quality information 2500 shown in FIG. 25 will be used. A specific flow of operation will be explained, referring to the operational flowchart in FIG. 26.

Please amend the specification beginning on page 78, line 1 as follows:

In this case, the communication interface utilization of cdma2000 1x 1x#1 is determined as 100-((6000/6660)x100) ≒ ≈ 10%.

Please amend the specification beginning on page 80, line 20 as follows:

In this case, the communication interface utilization of UMTS#1 is determined as 100-((2000-6660)/14880)x100) ≒ ≈ 10%.

Please amend the specification beginning on page 81, line 35 as follows:

In this case, the communication interface utilization of cdma2000 1x 1x#1 is determined as 100-(3000/6660x100) ≒ ≈ 54%.

Please amend the specification beginning on page 84, line 23 as follows:

In this case, the communication interface utilization of UMTS#1 is determined as 100-(12340/14880x100) ≒ ≈ 17%.